

Figure 1 A

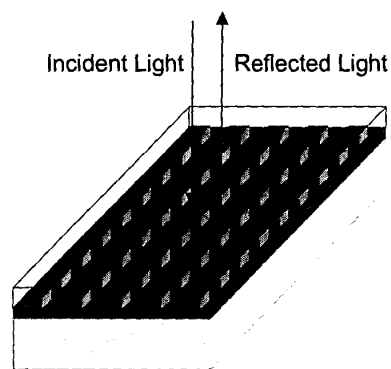


Figure 1 B

103750-2306660

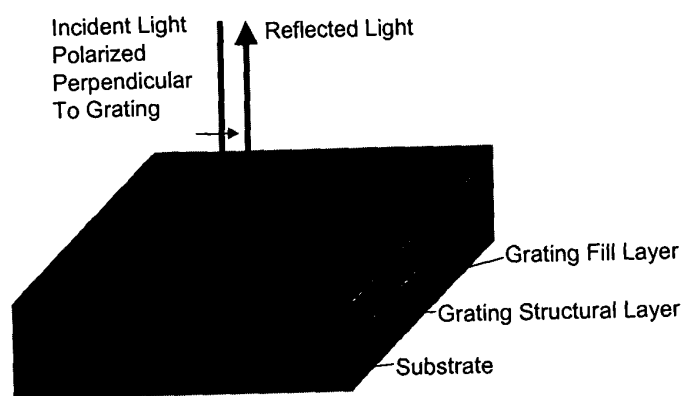


Figure 2.

10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100

FOI b7D b7E b7F

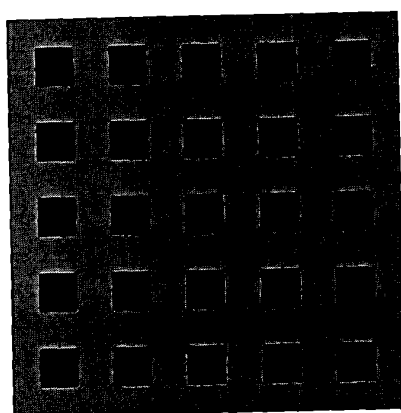


Figure 3A

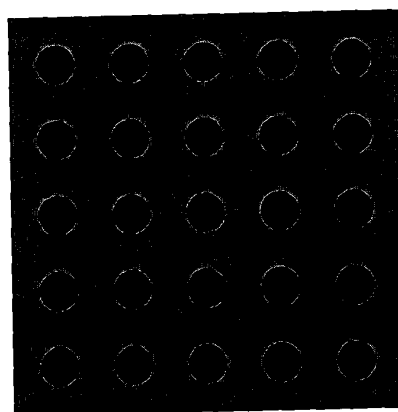


Figure 3B

Figure 3

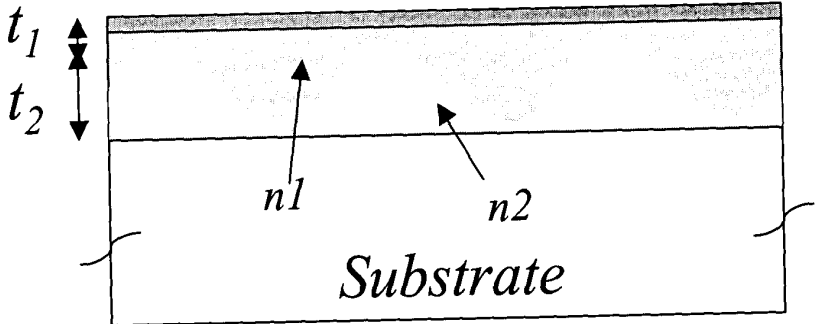
[illegible]

Figure 4.

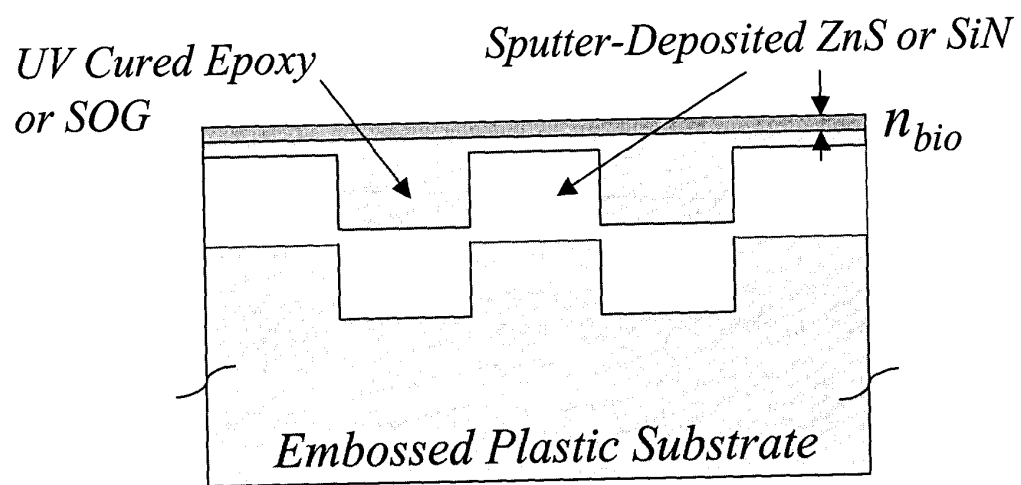
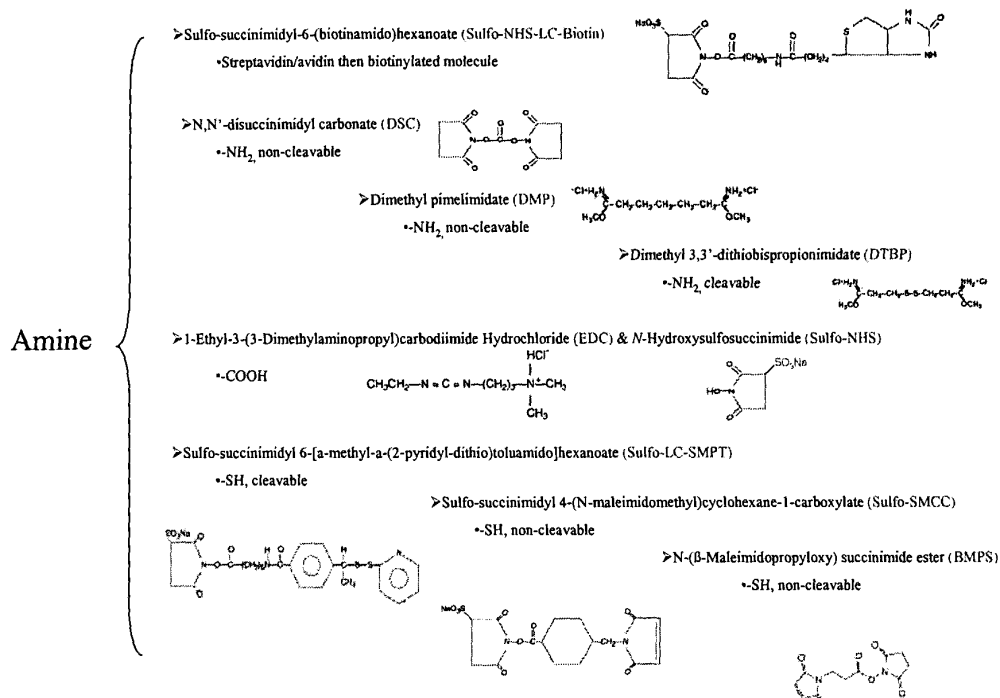


Figure 5.



Aldehyde

- Directly with aldehyde or first amino then aldehyde
- -NH₂

Ni(II)

- Using nitrilotriacetic acid (NTA) group, which forms a chelate with Ni(II)
- His-tagged molecules

Figure 6

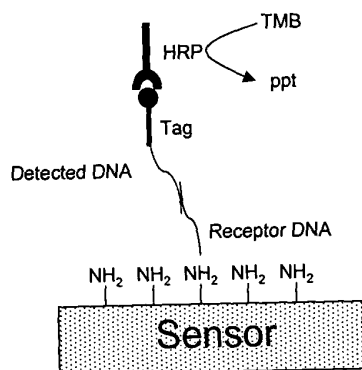


Figure 7A

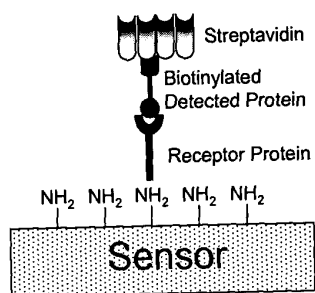


Figure 7B

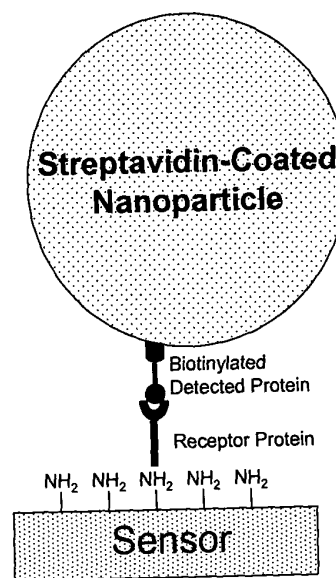


Figure 7C

Figure 7

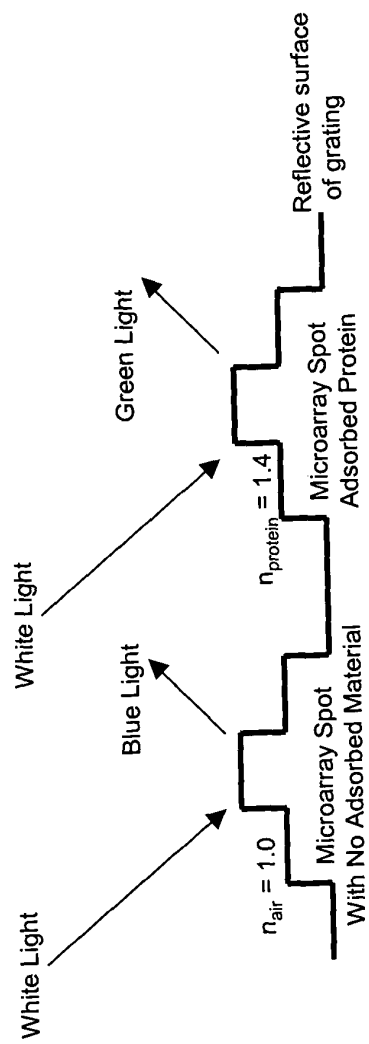


FIGURE 8

099303EE 084504
T05120 " 22E02E60

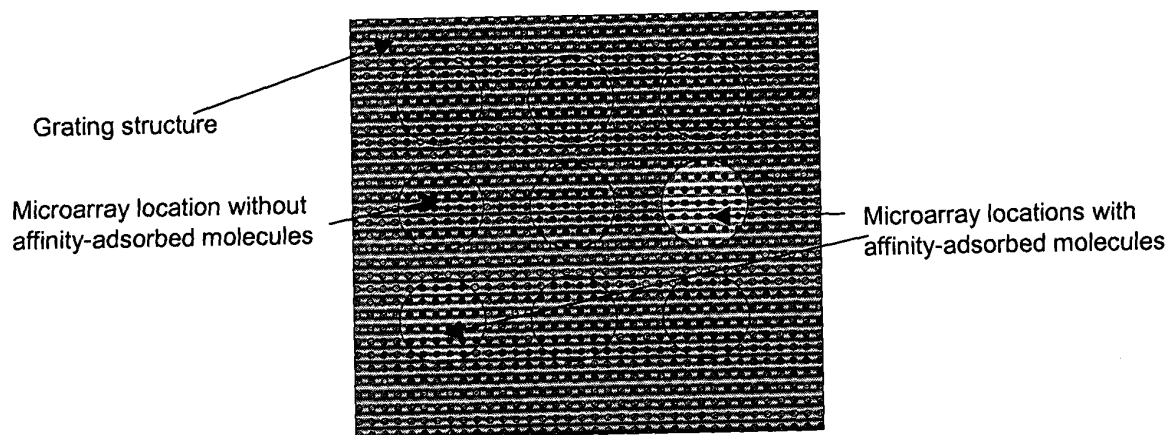


FIGURE 9

□ Microtiter plate

□ Microarray slide

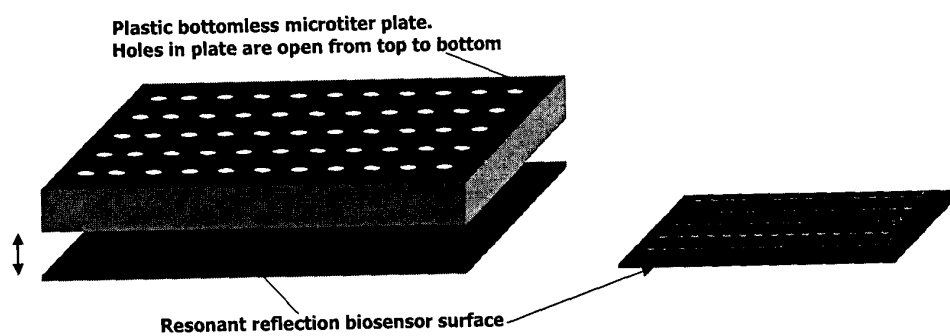


Figure 10A

Figure 10B

Figure 10

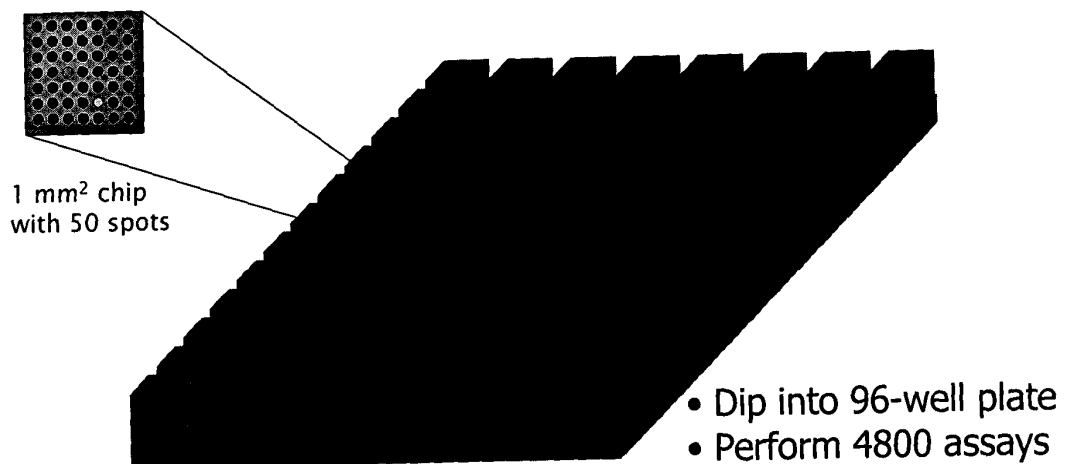


Figure 11

FIGURE 12

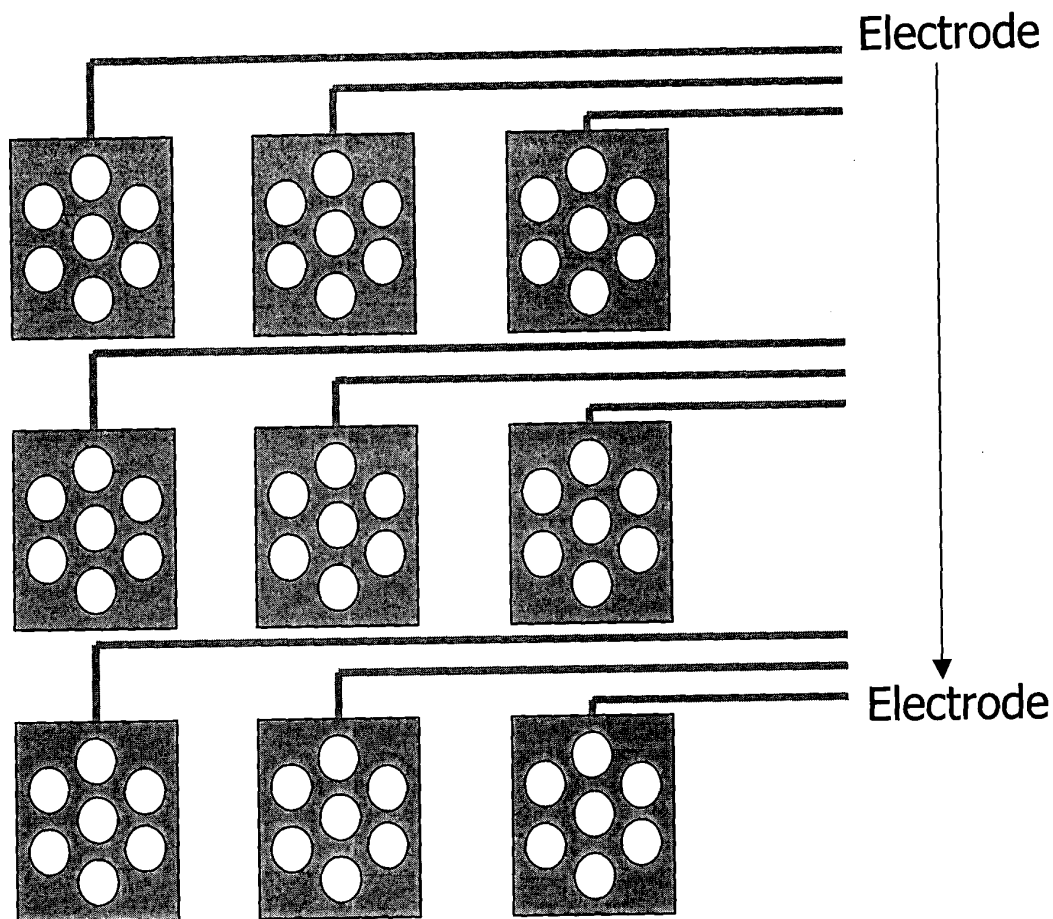
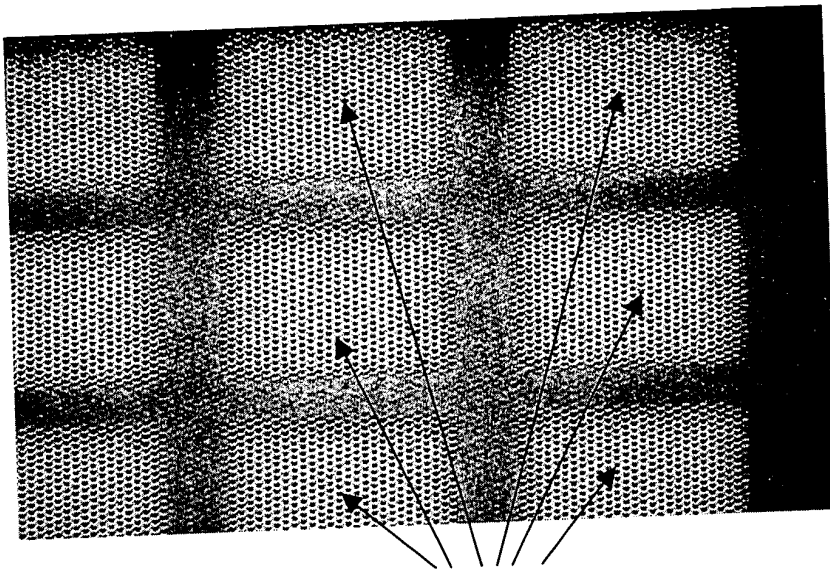


FIGURE 12



Separate electrode grating regions

FIGURE 13

00930352.004504
109780.2500000

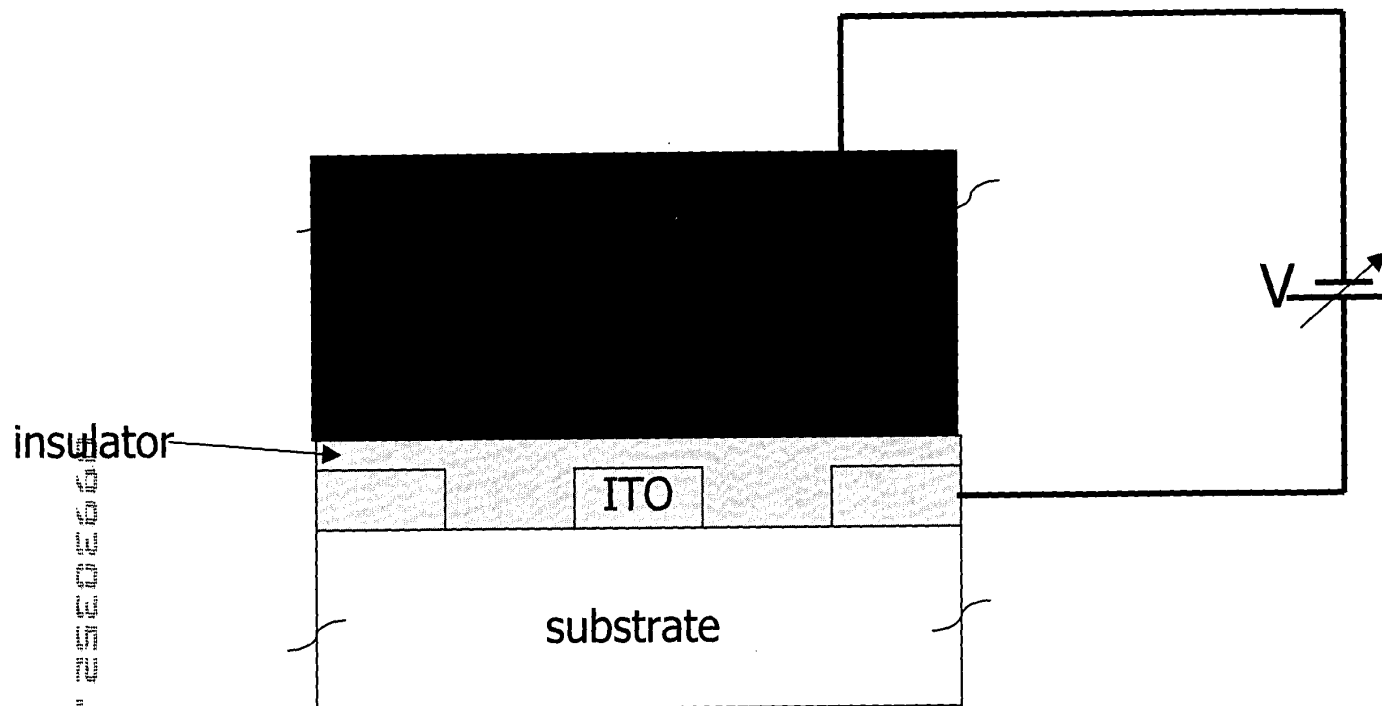


FIGURE 14

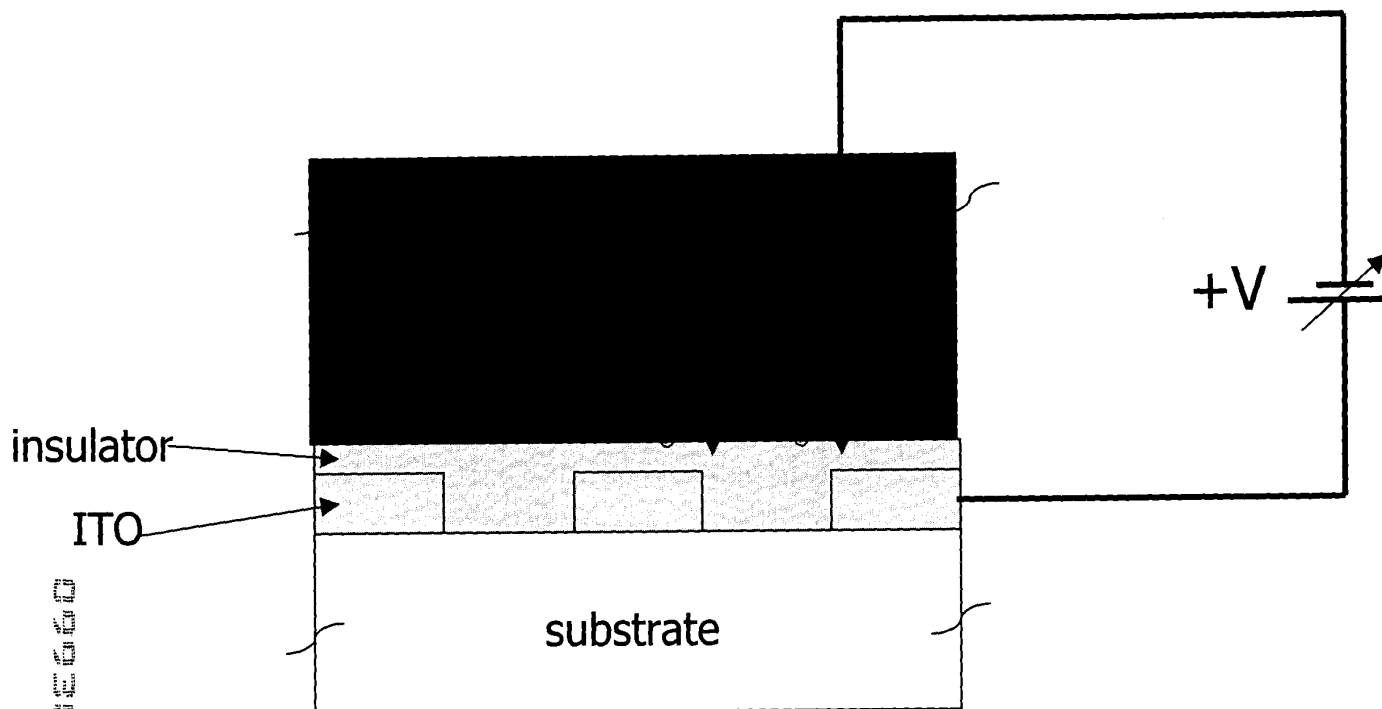


FIGURE 15

TOP SECRET

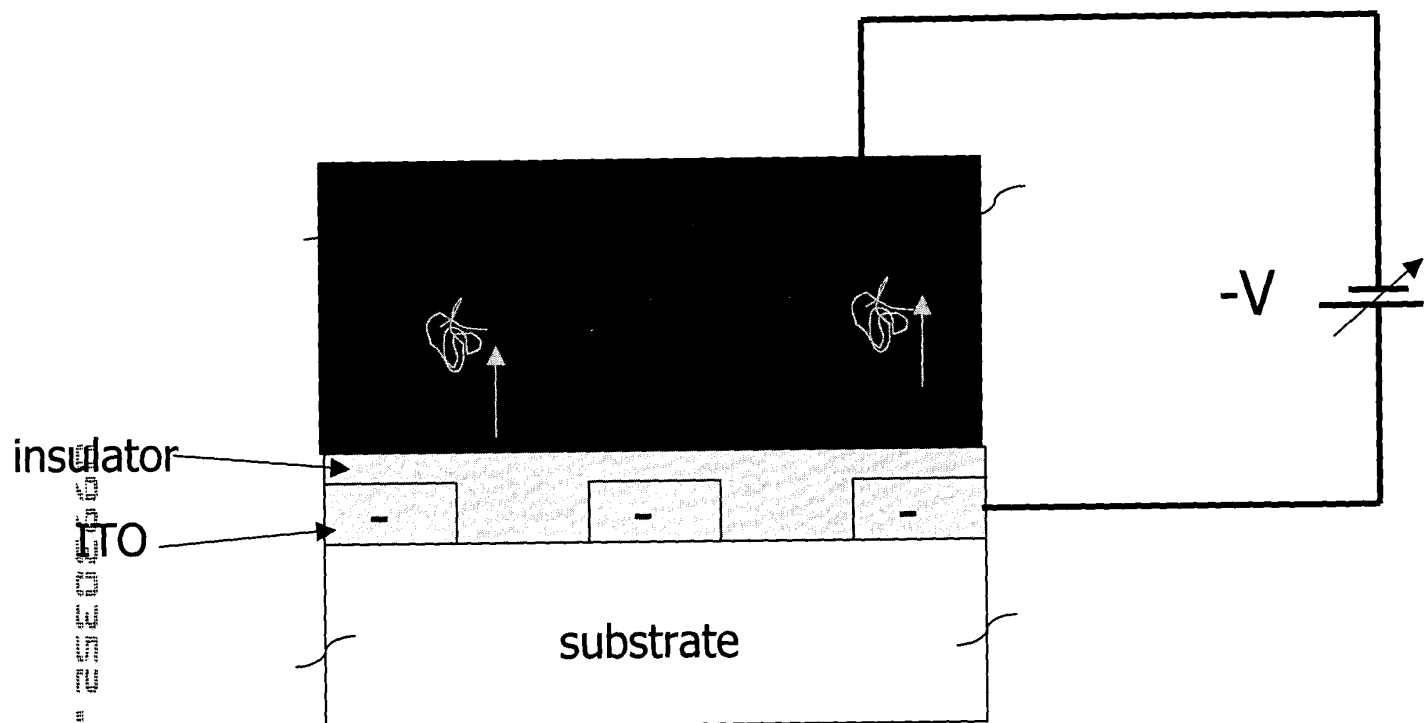


FIGURE 16

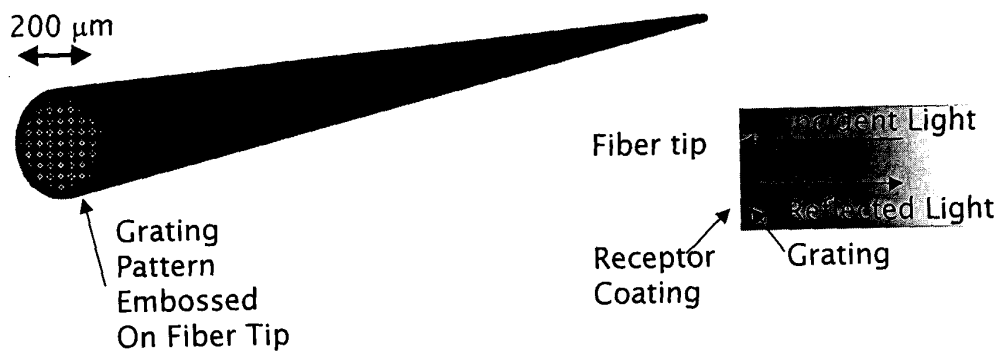


Figure 17

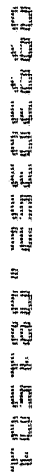


Figure 18

TOP SECRET

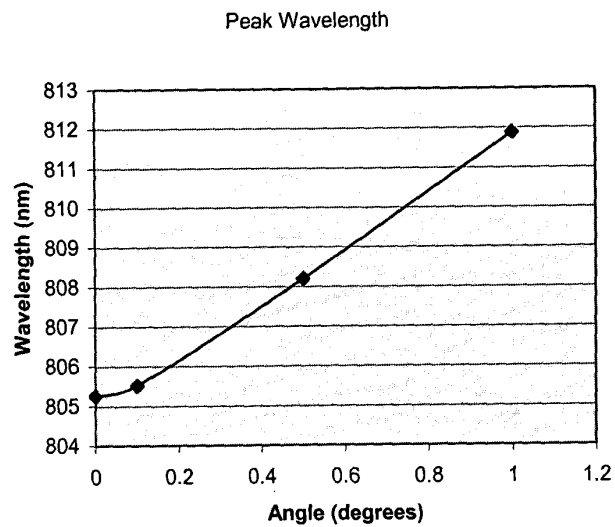


Figure 19

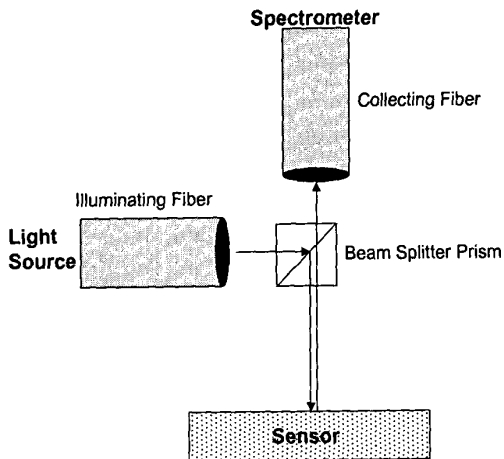
[illegible]

Figure 20

099303EE-0E4E04

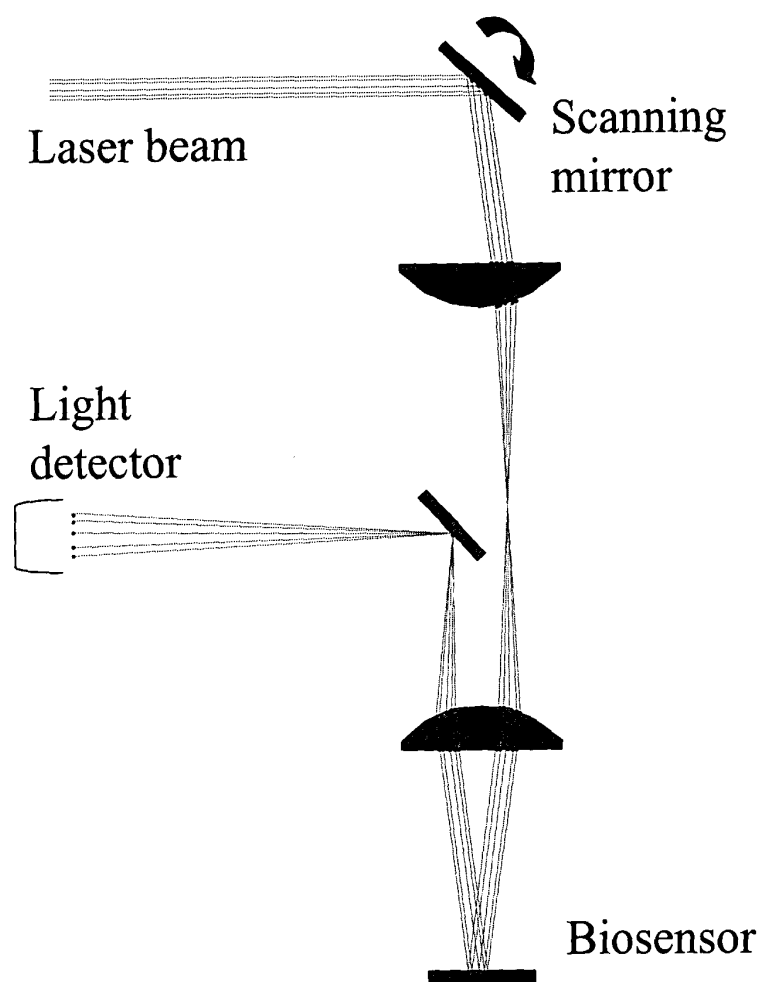


Figure 21

09030352 081504
T05180 25E0E060

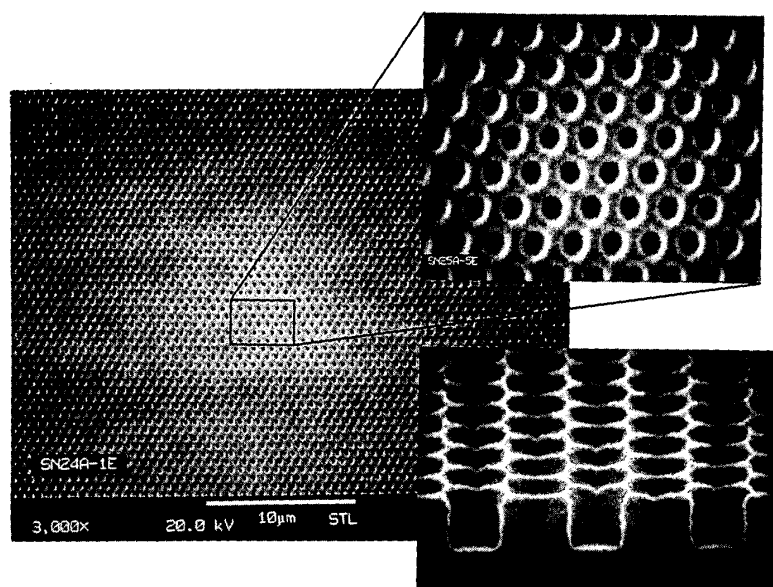


Figure 22

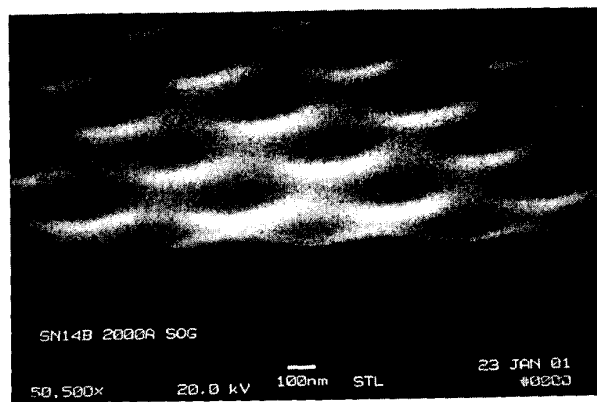


Figure 23

00030352.001501
T09T00.25202600

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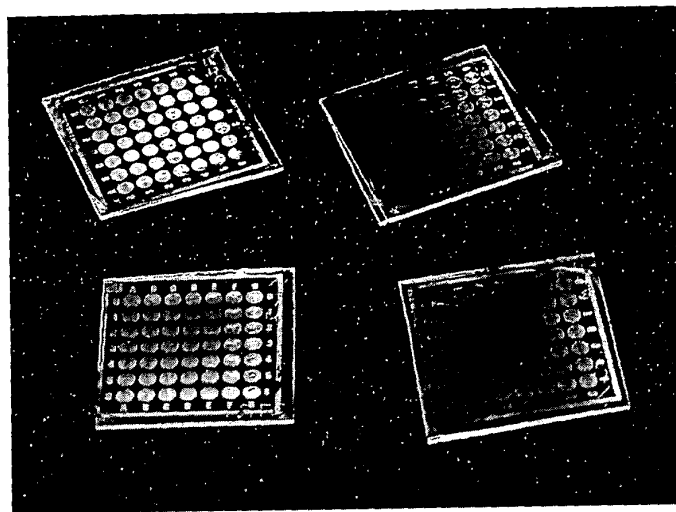


Figure 24

Albumin Deposition on Resonant Reflector

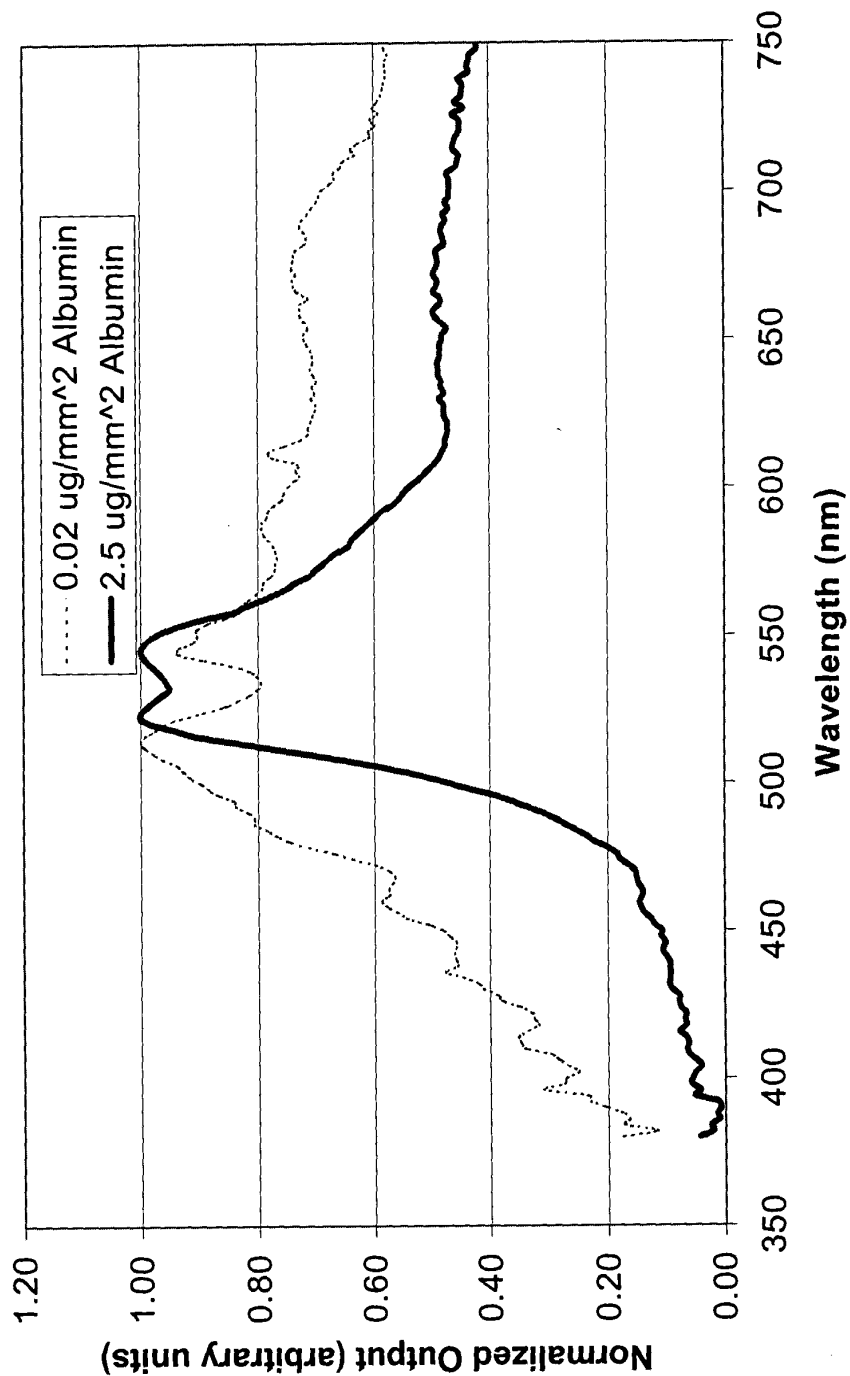


Figure 25

Figure 26

Resonant Reflector Measured in Water

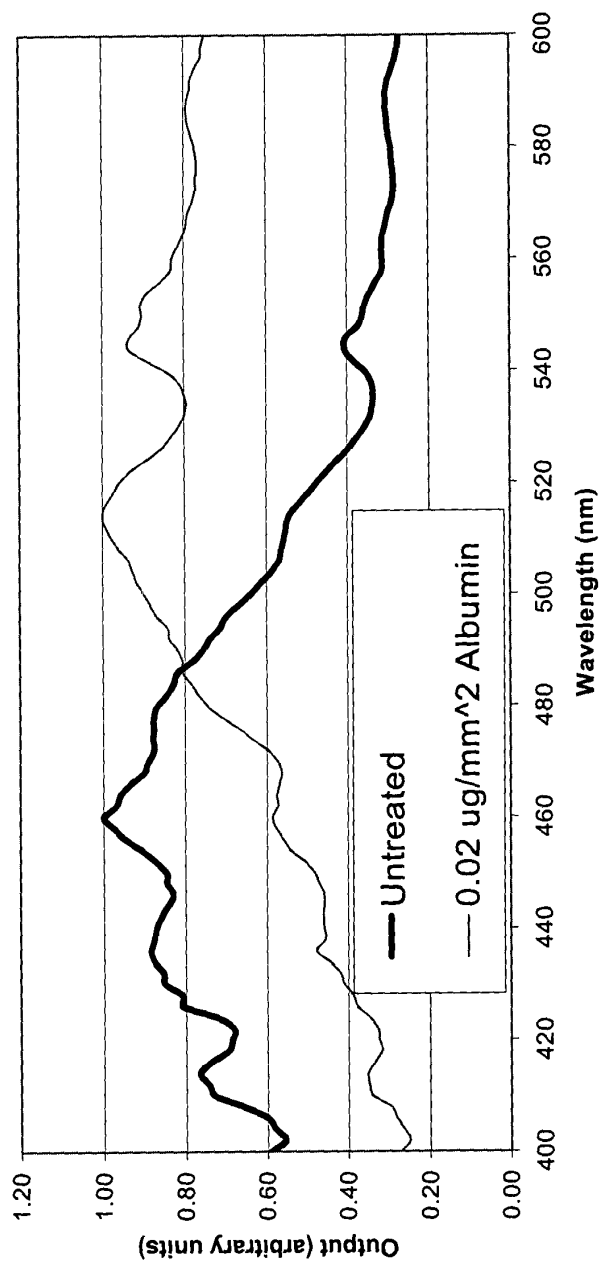


Figure 27

Bacteria immobilization on structure

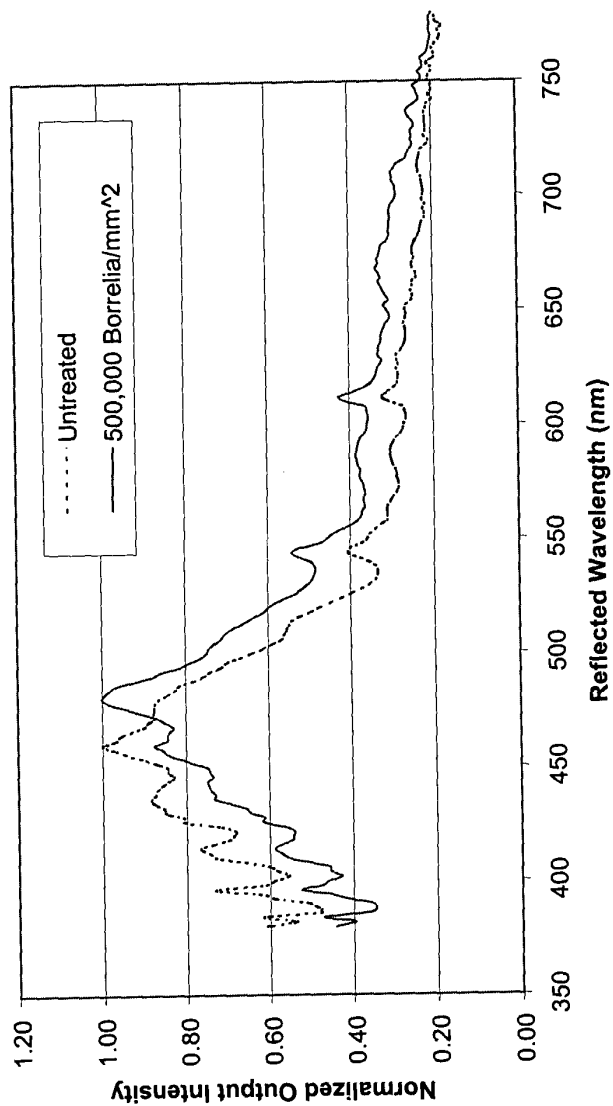


Figure 28

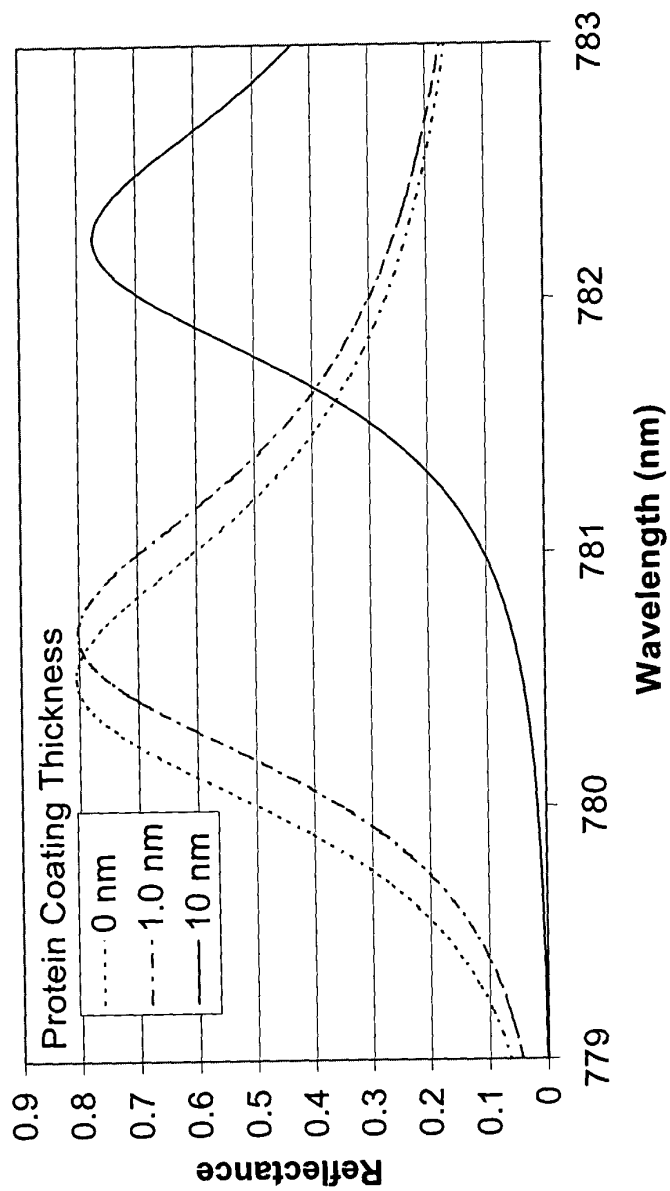
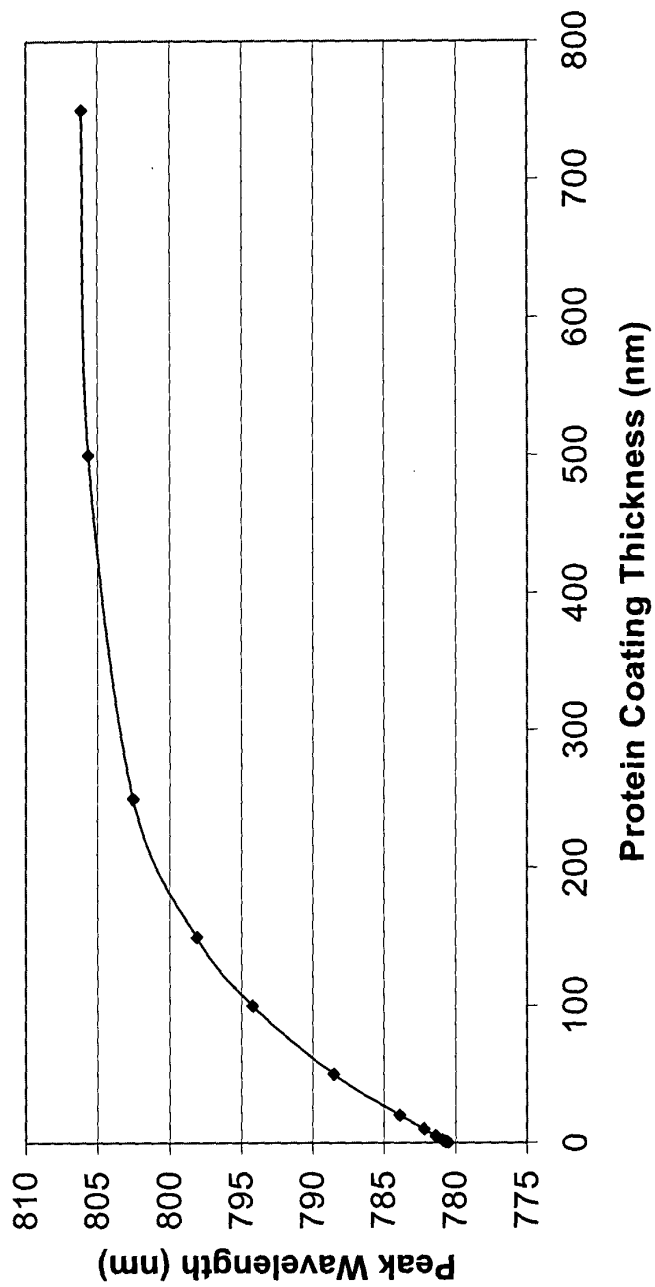


Figure 29



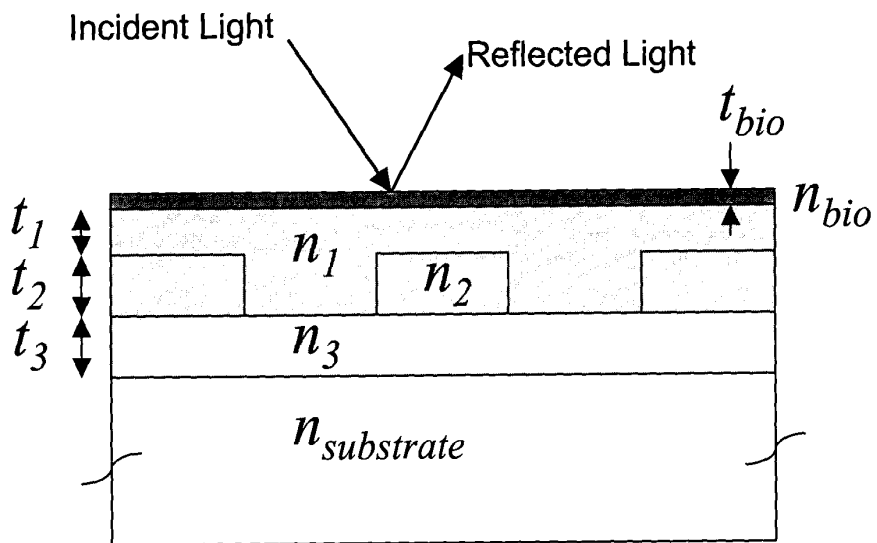


FIGURE 30

Reflected Resonance with Deposited Protein

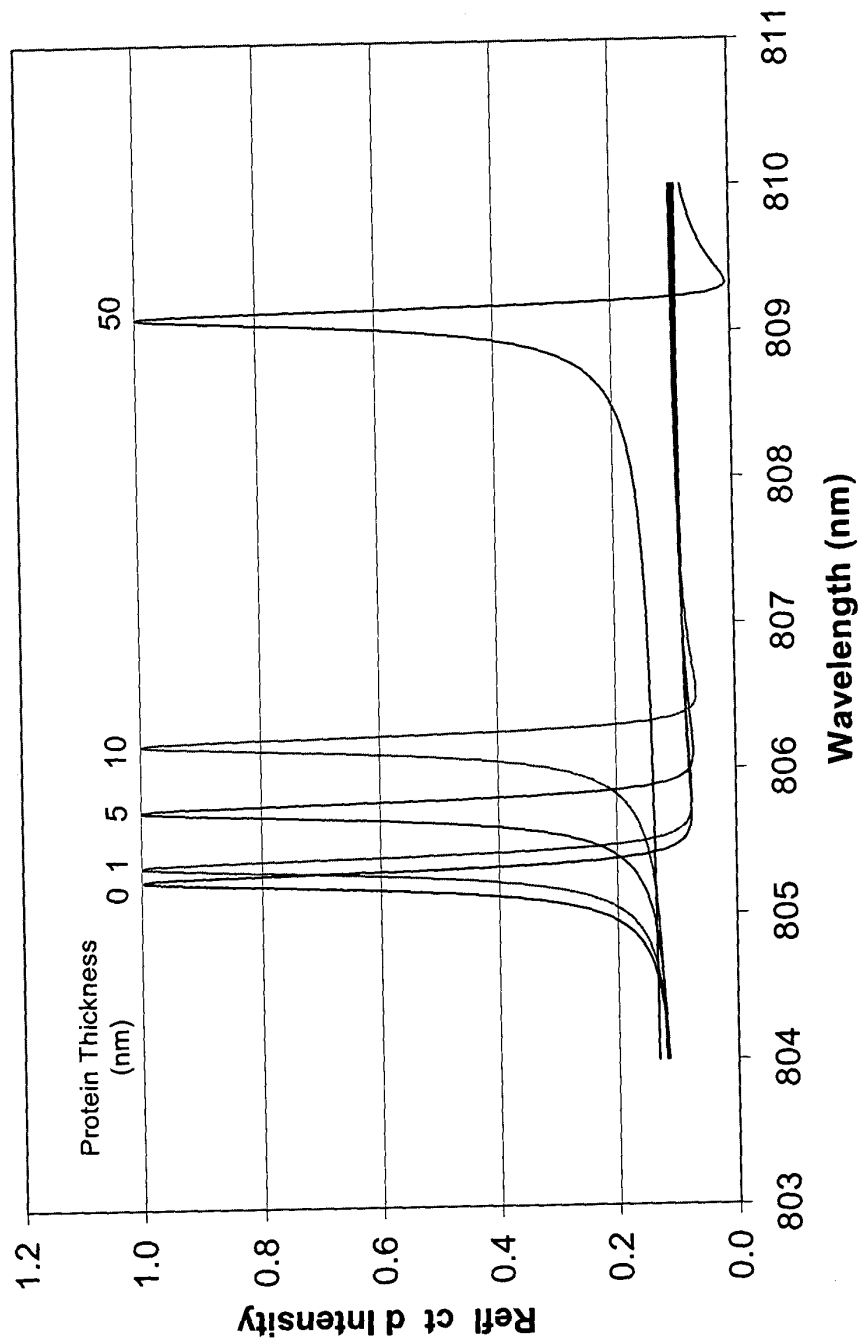


Figure 31

Resonant Peak Wavelength Dependence on Deposited Protein Thickness

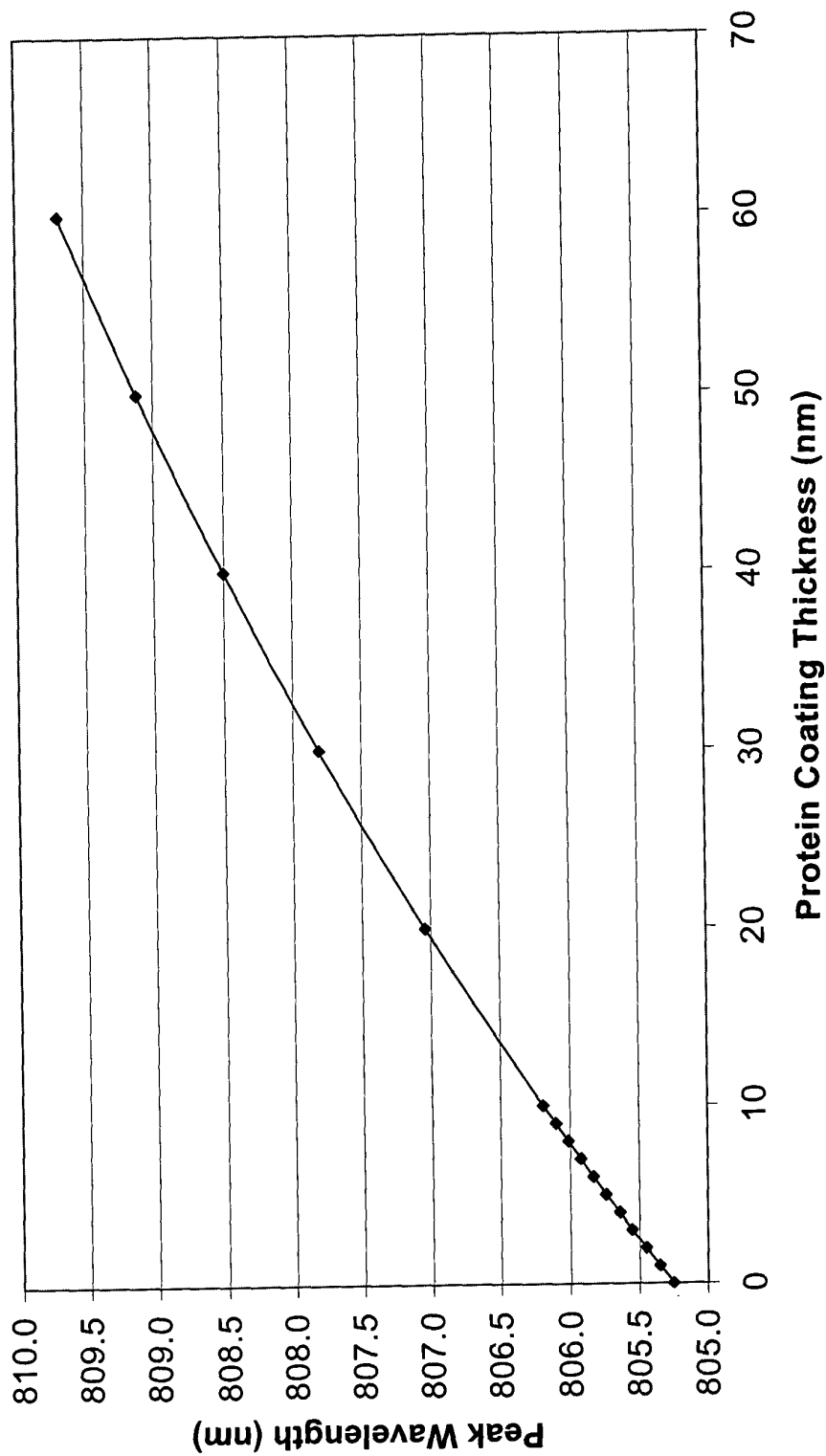


Figure 32

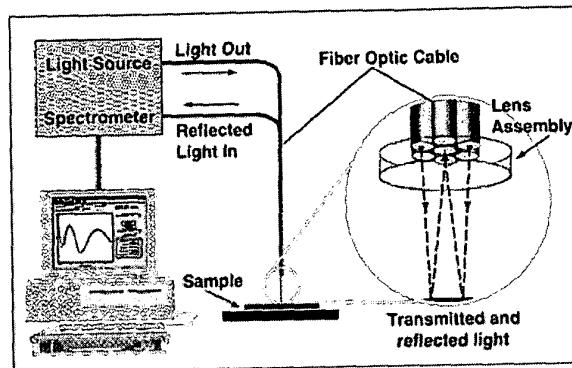


Figure 33

103780" 25E0E660

105150" 2300000

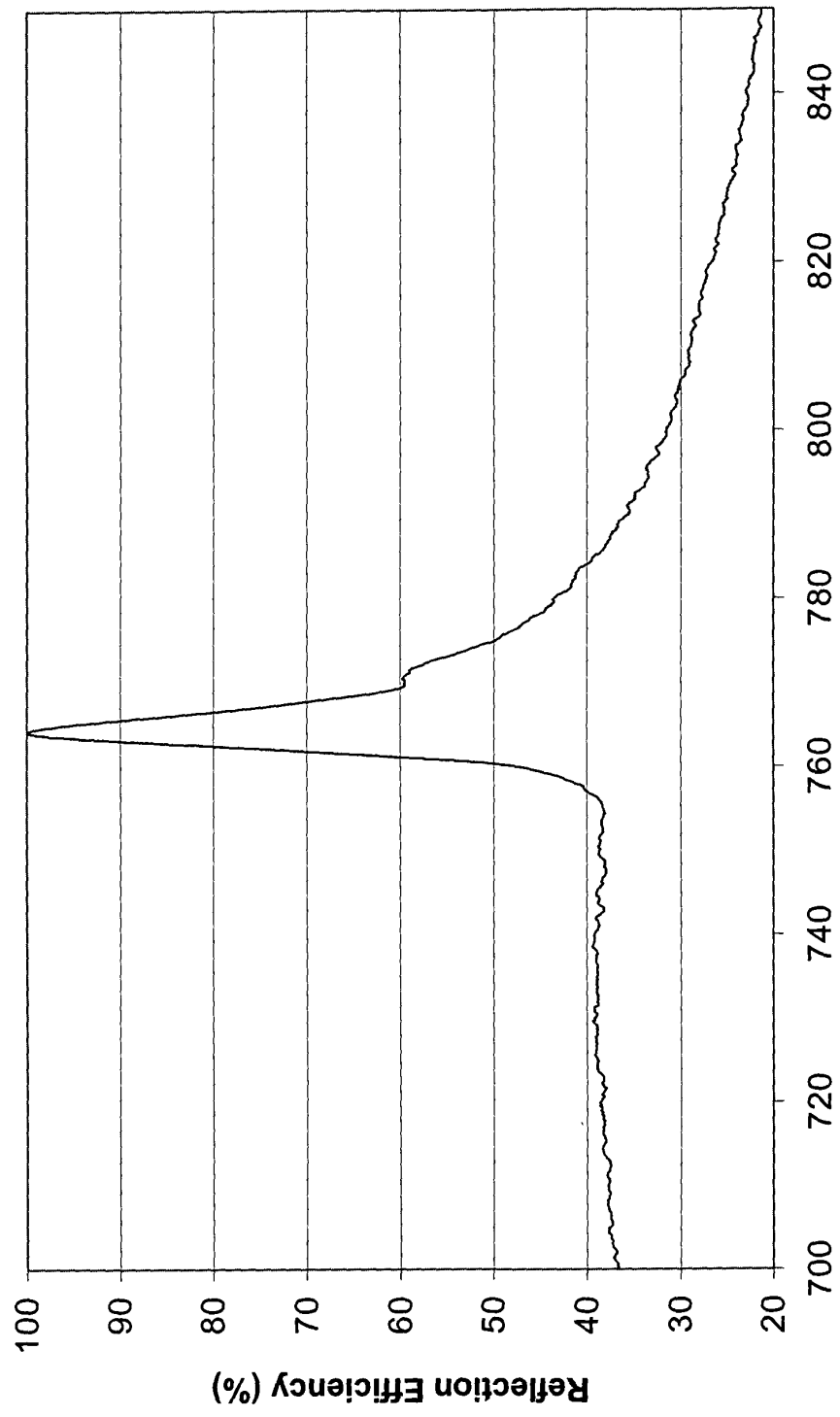


Figure 34

Figure 35

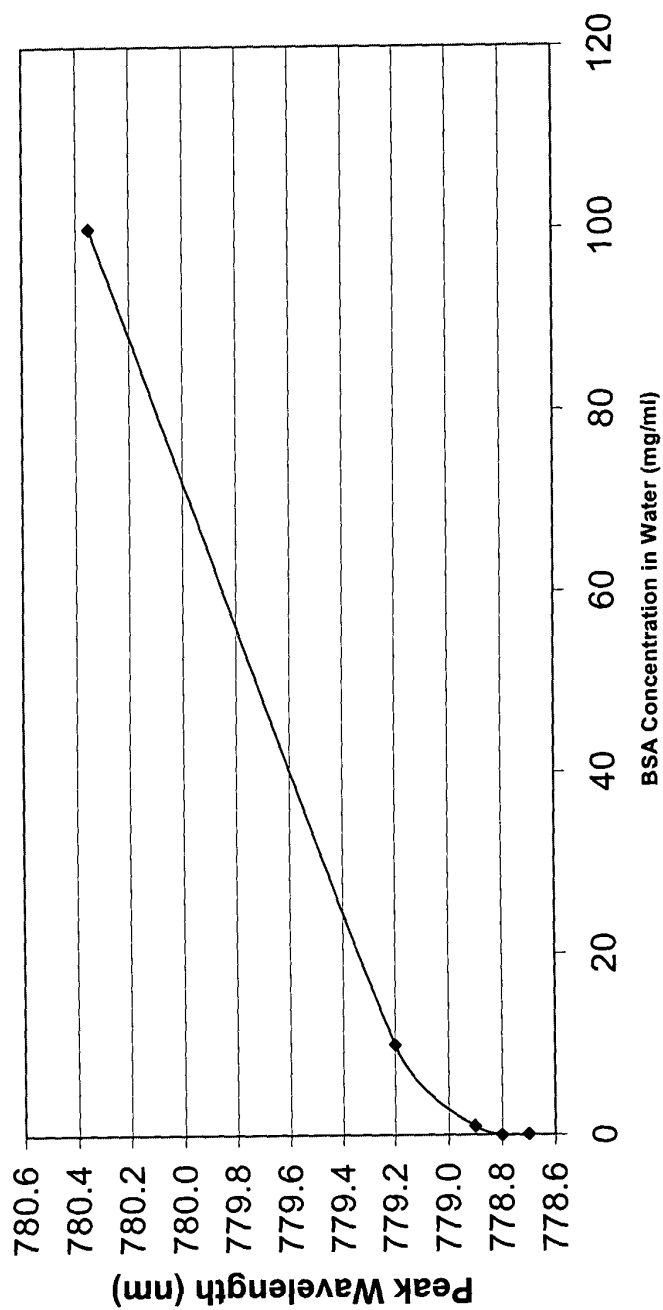


Figure 36

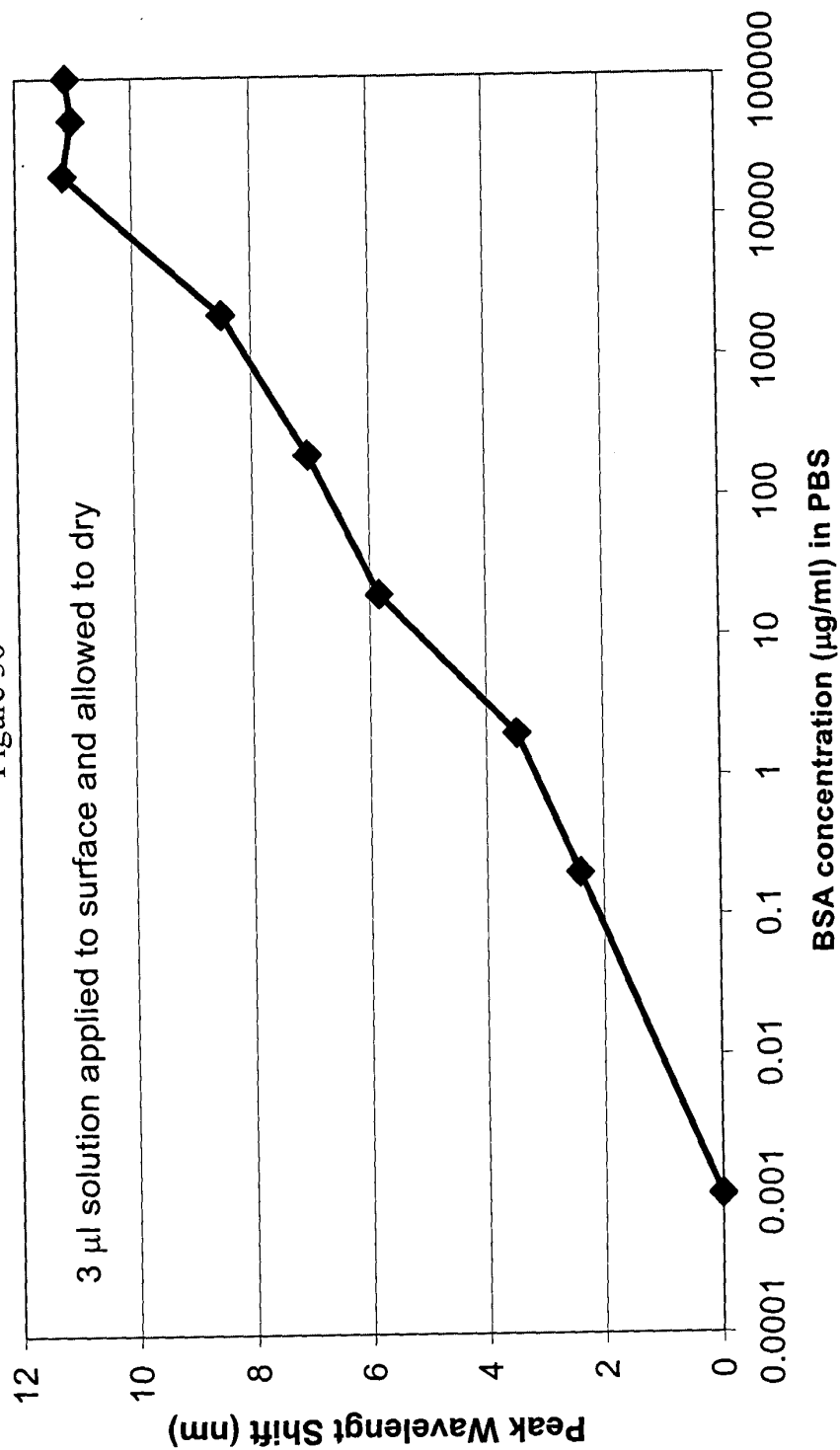


Figure 37A

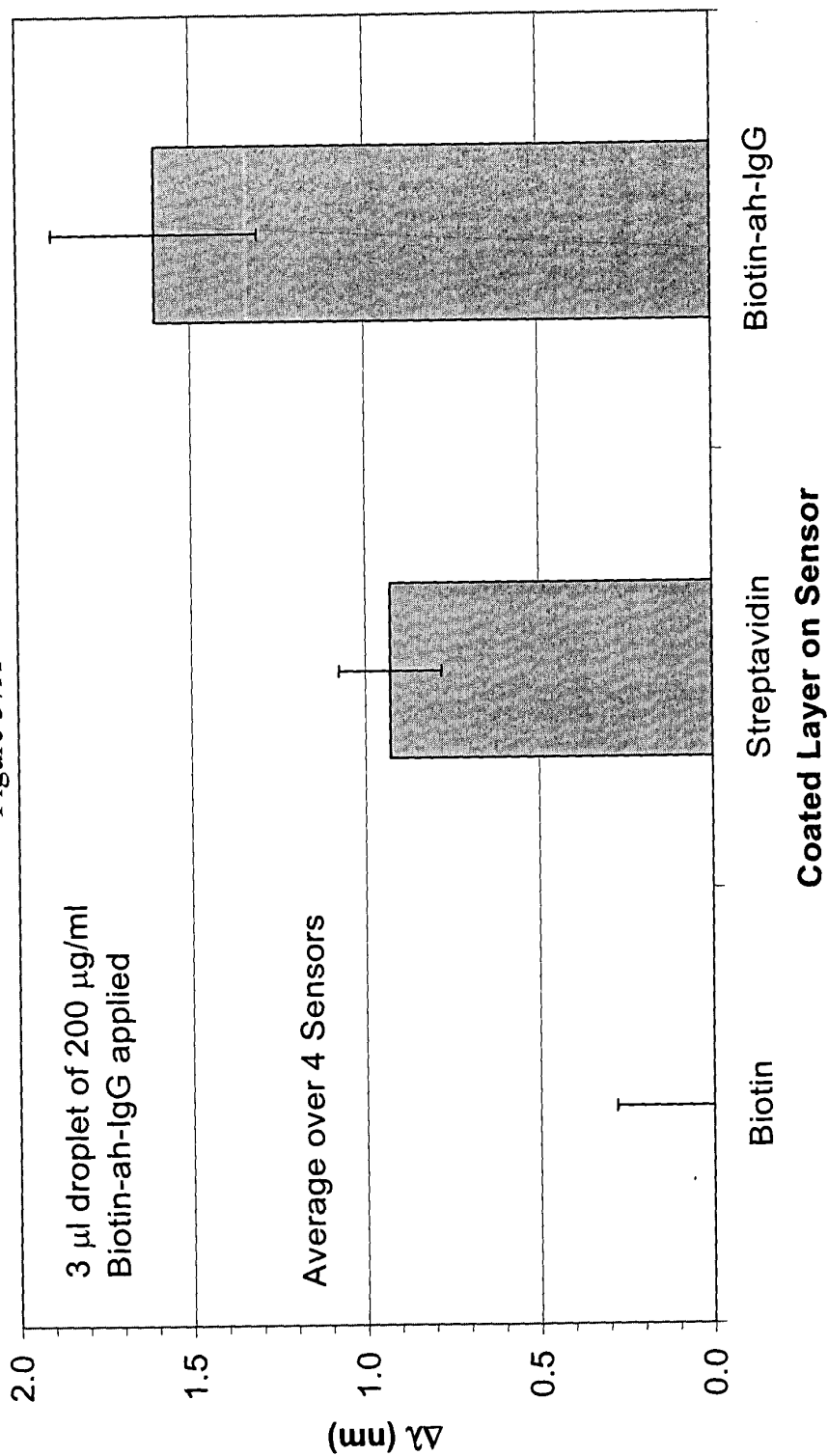
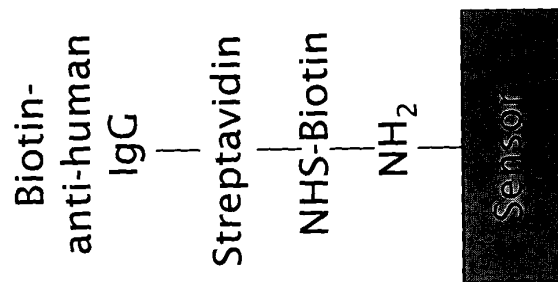


Figure 37B



FORM 800 23200000

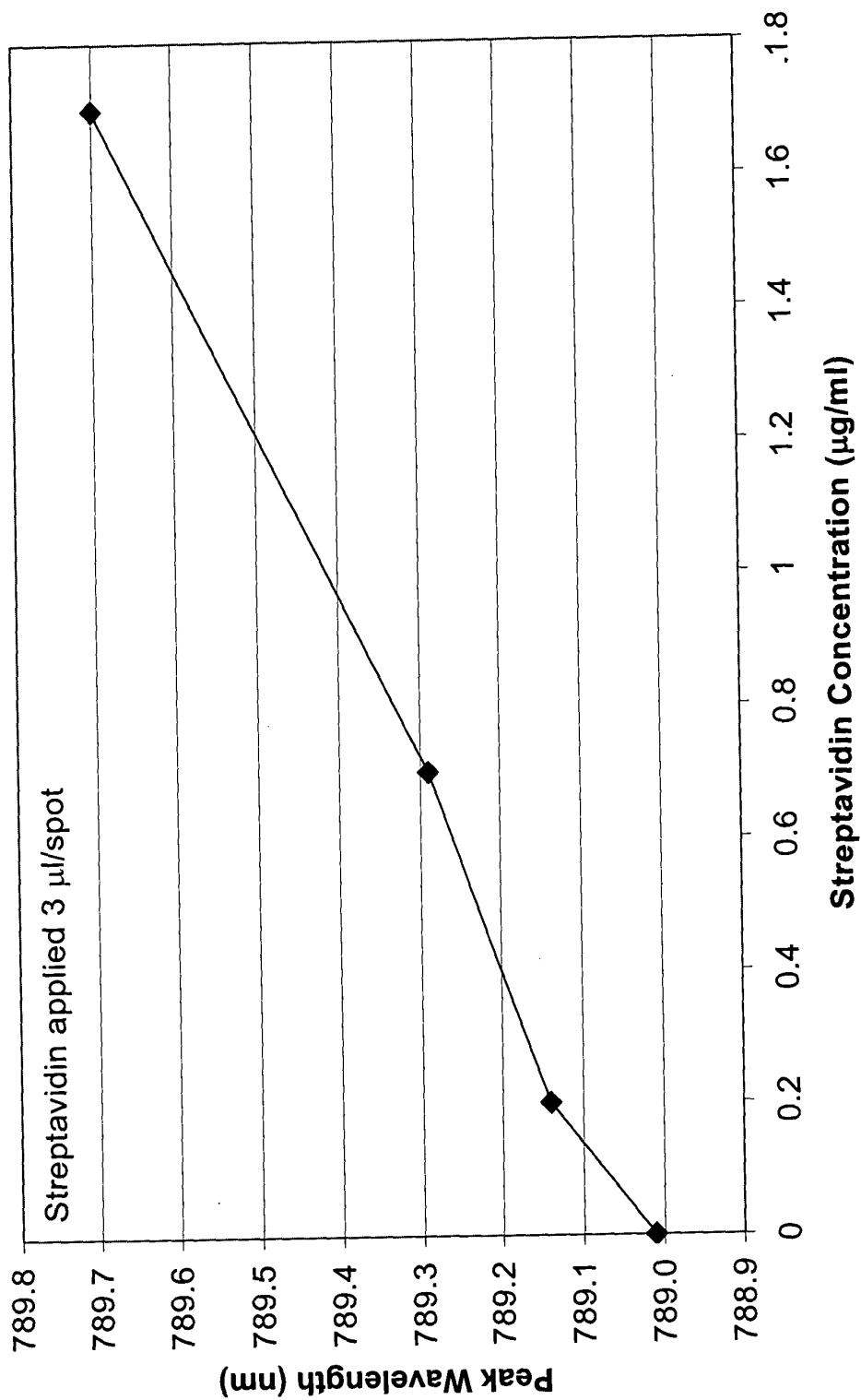
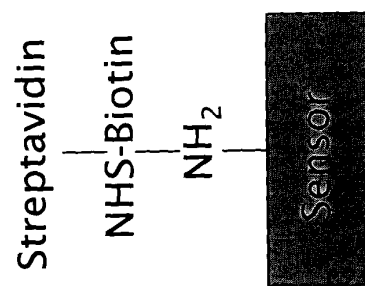


Figure 38A

Figure 38B



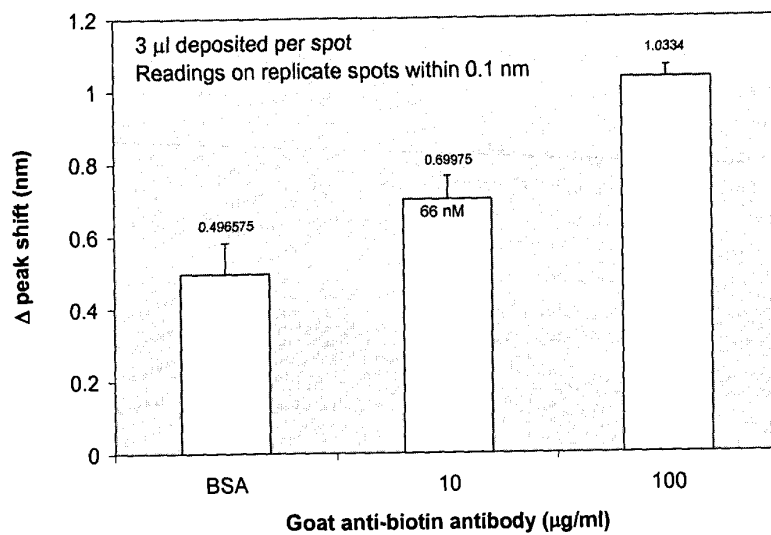


Figure 39A

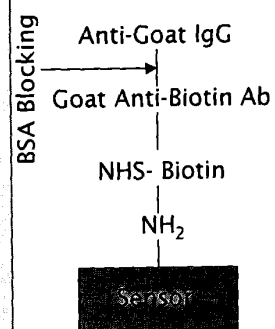


Figure 39B

Figure 39

105720"290000

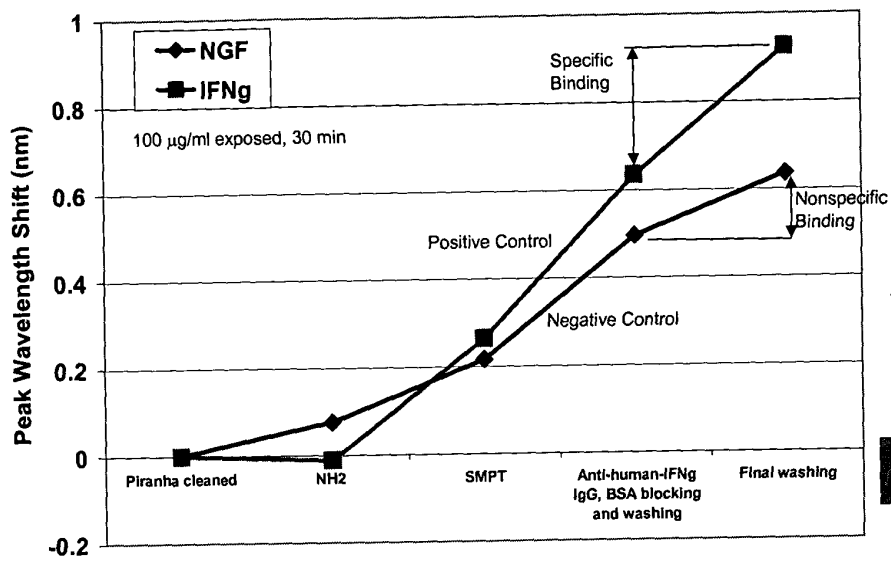


Figure 40A

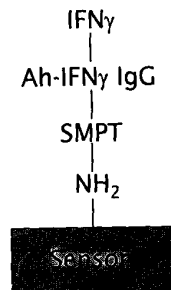


Figure 40B

Figure 40

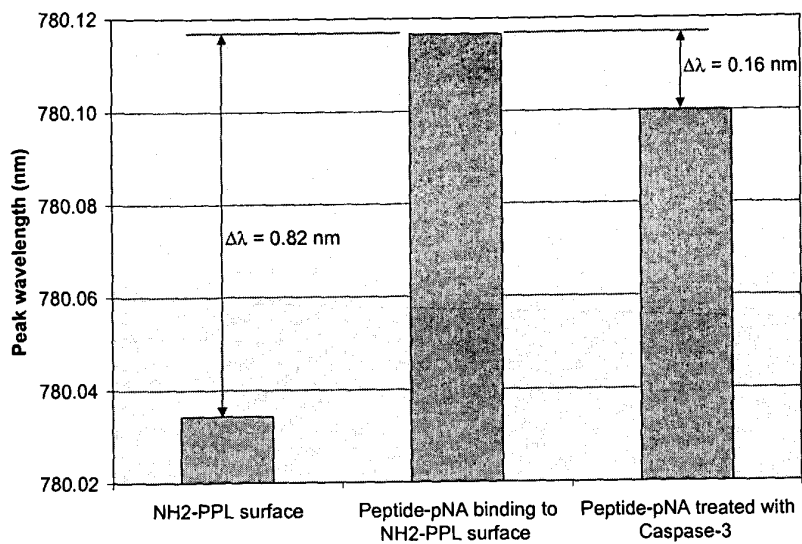


Figure 41A

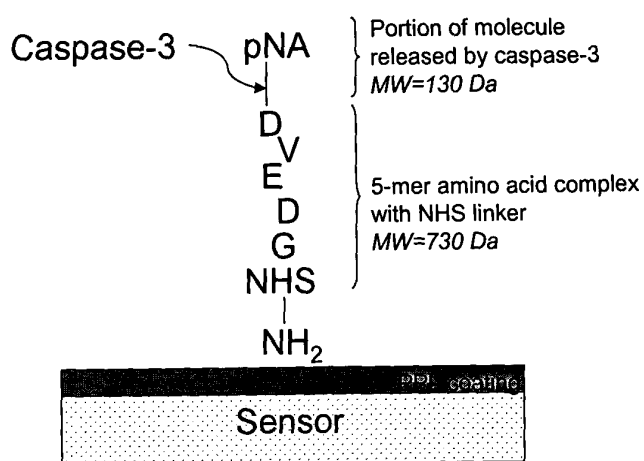
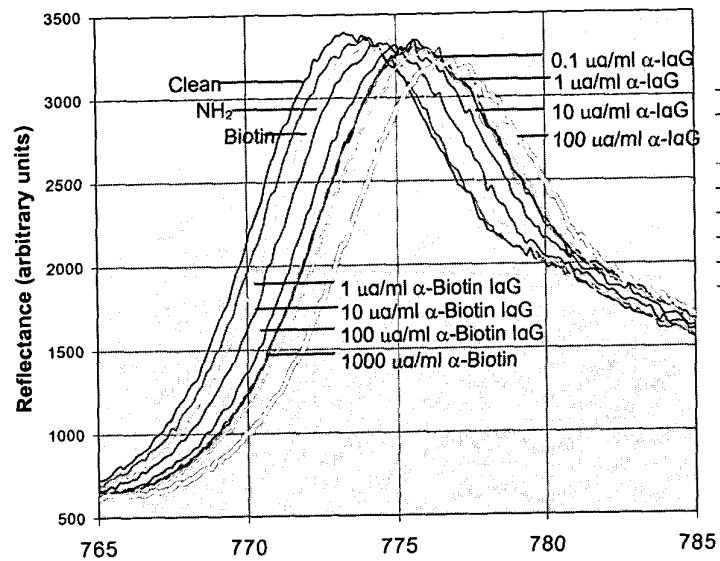


Figure 41B

Figure 41



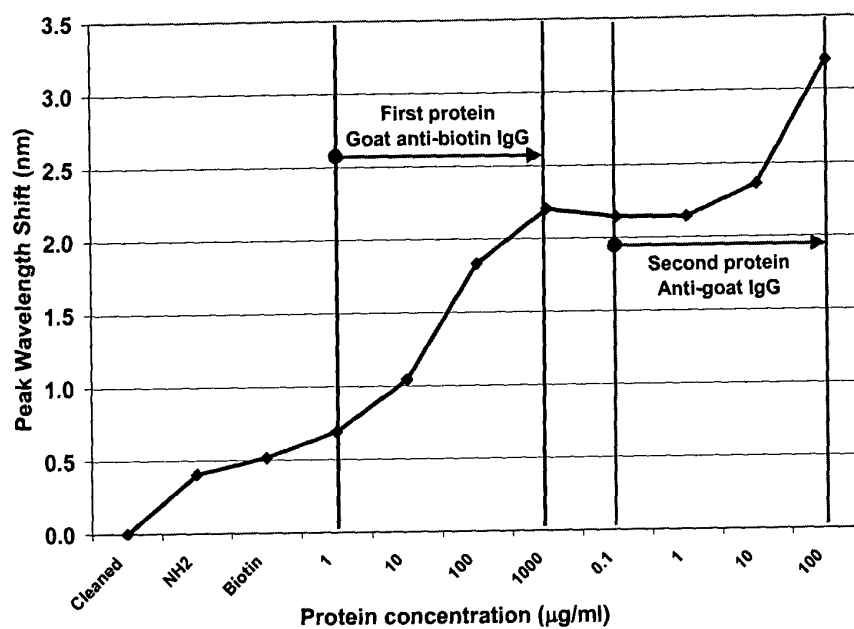


Figure 43A

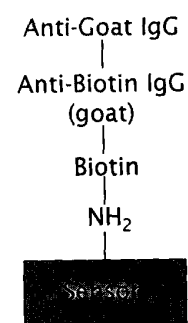


Figure 43B

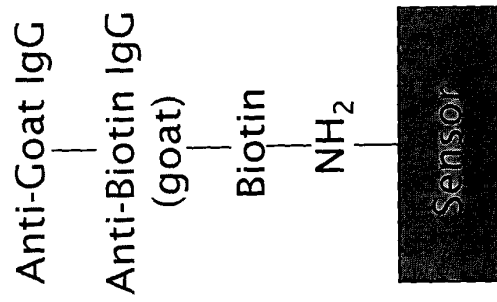
Figure 43

Figure 1 is a line graph showing the change in peak wavelength (nm) over time (min) for the addition of 100 µg/ml anti-goat IgG at t=0. The x-axis represents Time (min) from 0 to 30, and the y-axis represents Peak wavelength (nm) from 775.4 to 776.2. The curve shows a sharp increase in peak wavelength starting at t=0, reaching a plateau around 776.15 nm after approximately 15 minutes.

Time (min)	Peak wavelength (nm)
0	775.55
2	775.60
4	775.65
6	775.70
8	775.75
10	775.80
12	775.85
14	775.90
16	775.95
18	776.00
20	776.05
22	776.10
24	776.12
26	776.14
28	776.15
30	776.15

30

Figure 44B



778.2 778.0 777.8 777.6 777.4 777.2 777.0 776.8

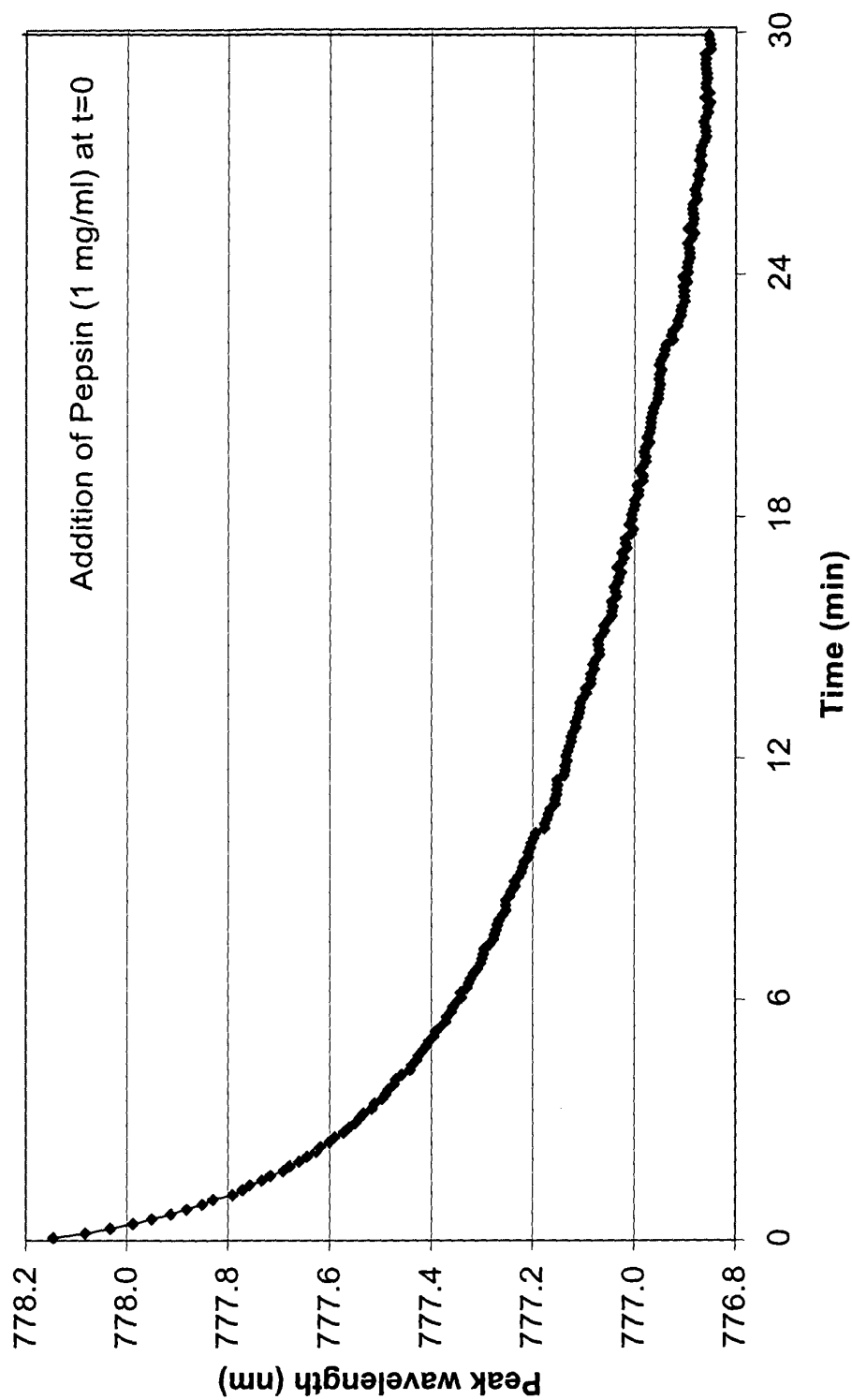
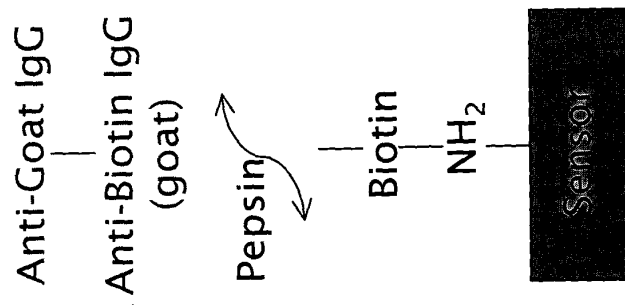


Figure 45A

Figure 45B



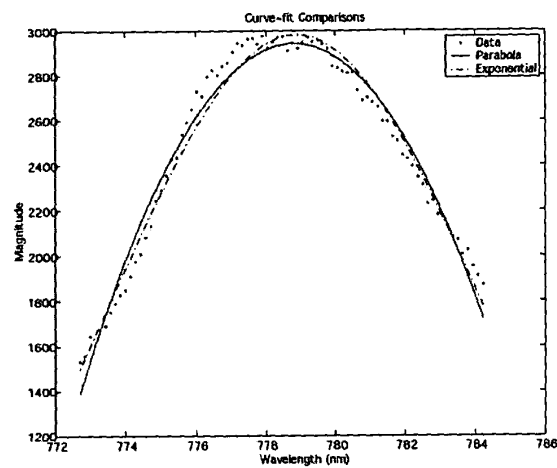


Figure 46

TOP SECRET 000000000000

103T30" 29202600

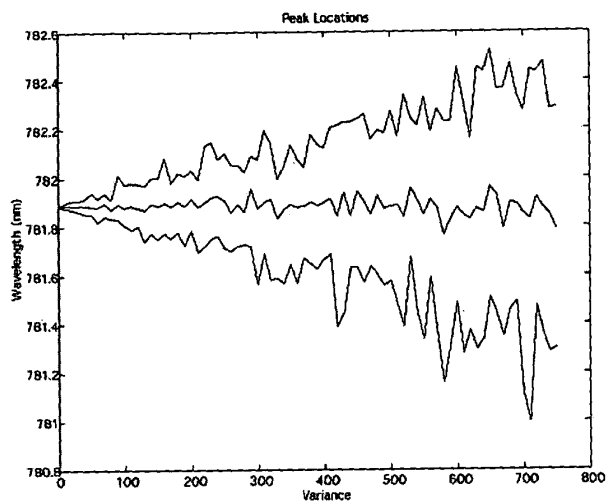
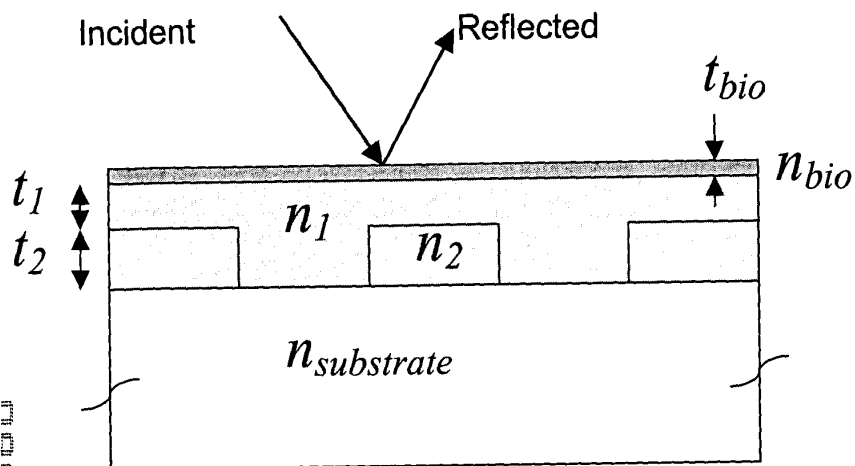


Figure 47



Material 1 = Electrical Insulator (photoresist, epoxy, glass)

Material 2 = Indium tin oxide conductor

Substrate = Glass

FIGURE 48

TOPIC: "SPECIAL"

Concentric Circle Design

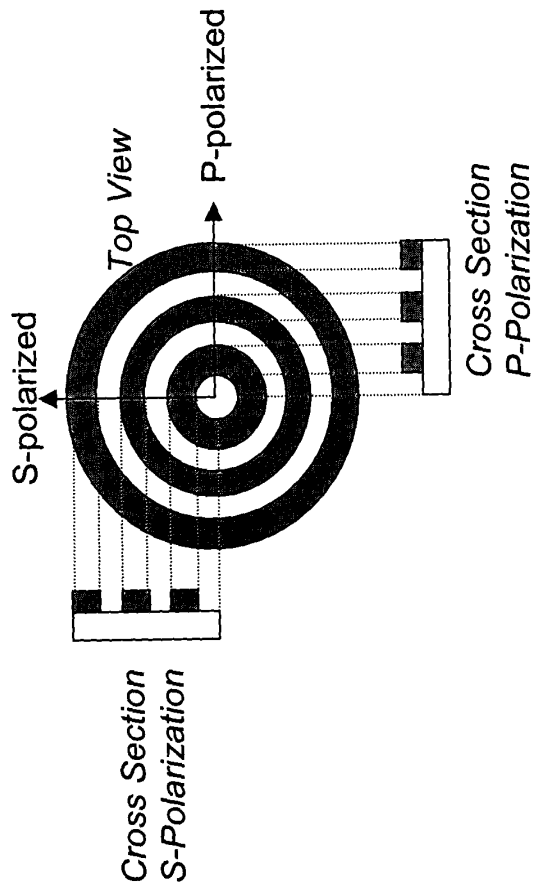


Figure 49

Figure 50
Hexagonal Grid Design

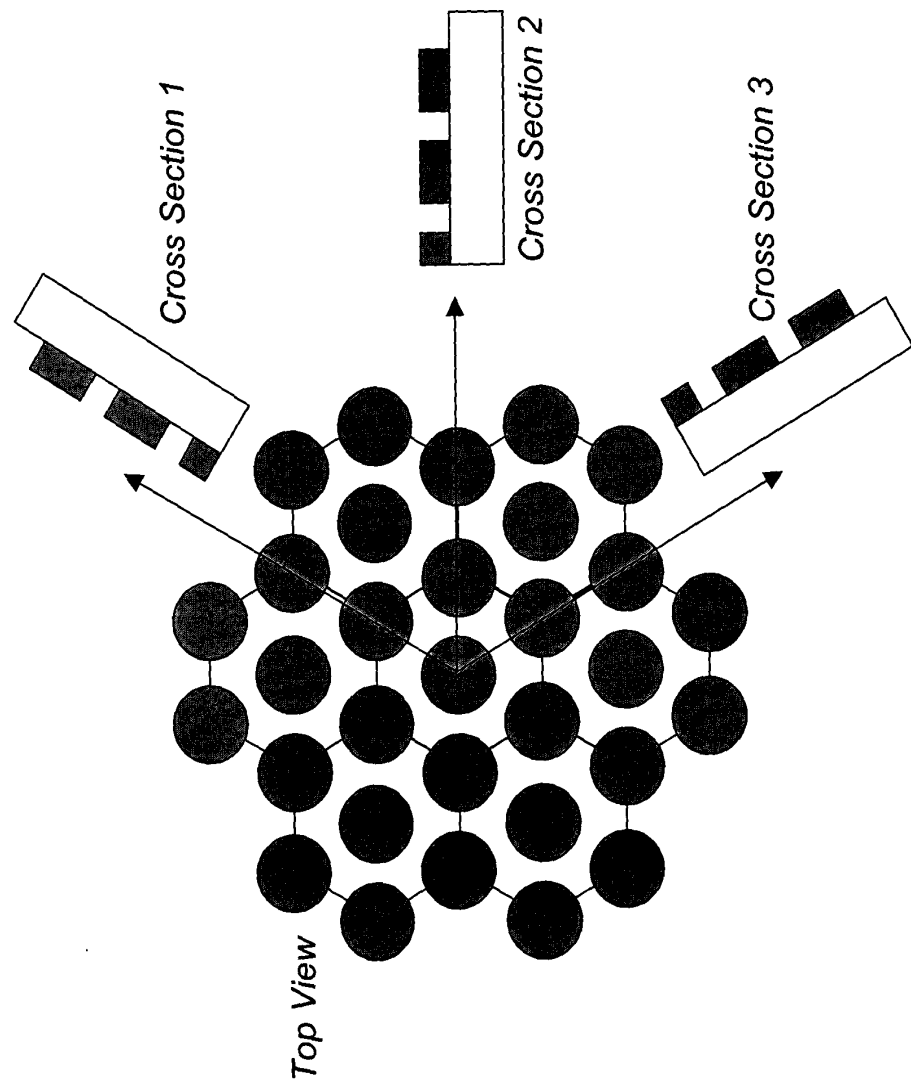


Figure 51

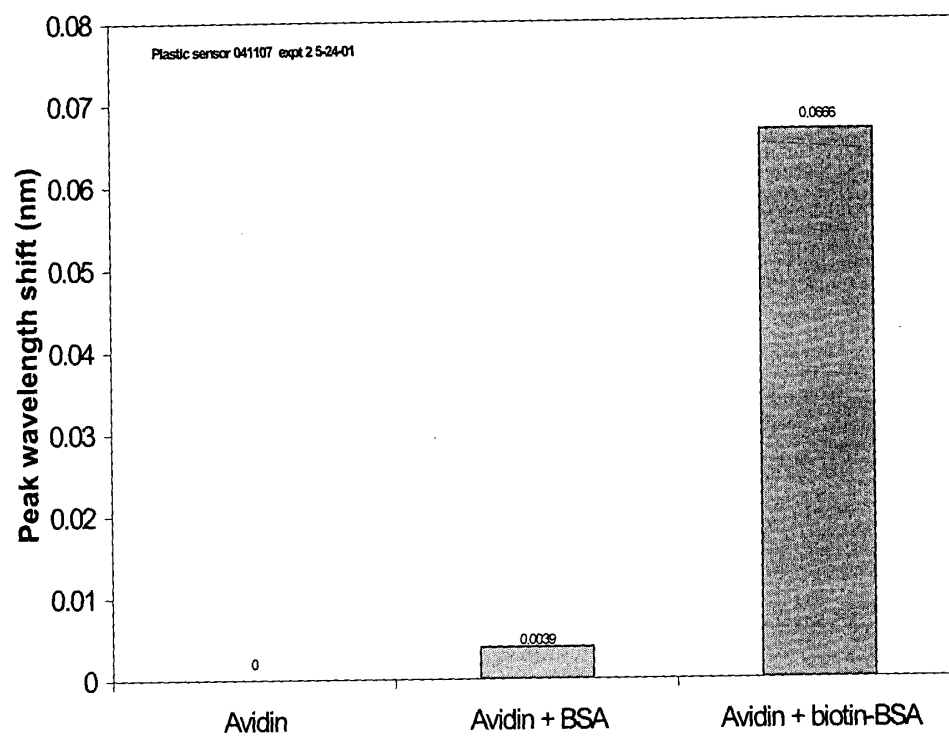


FIG. 52

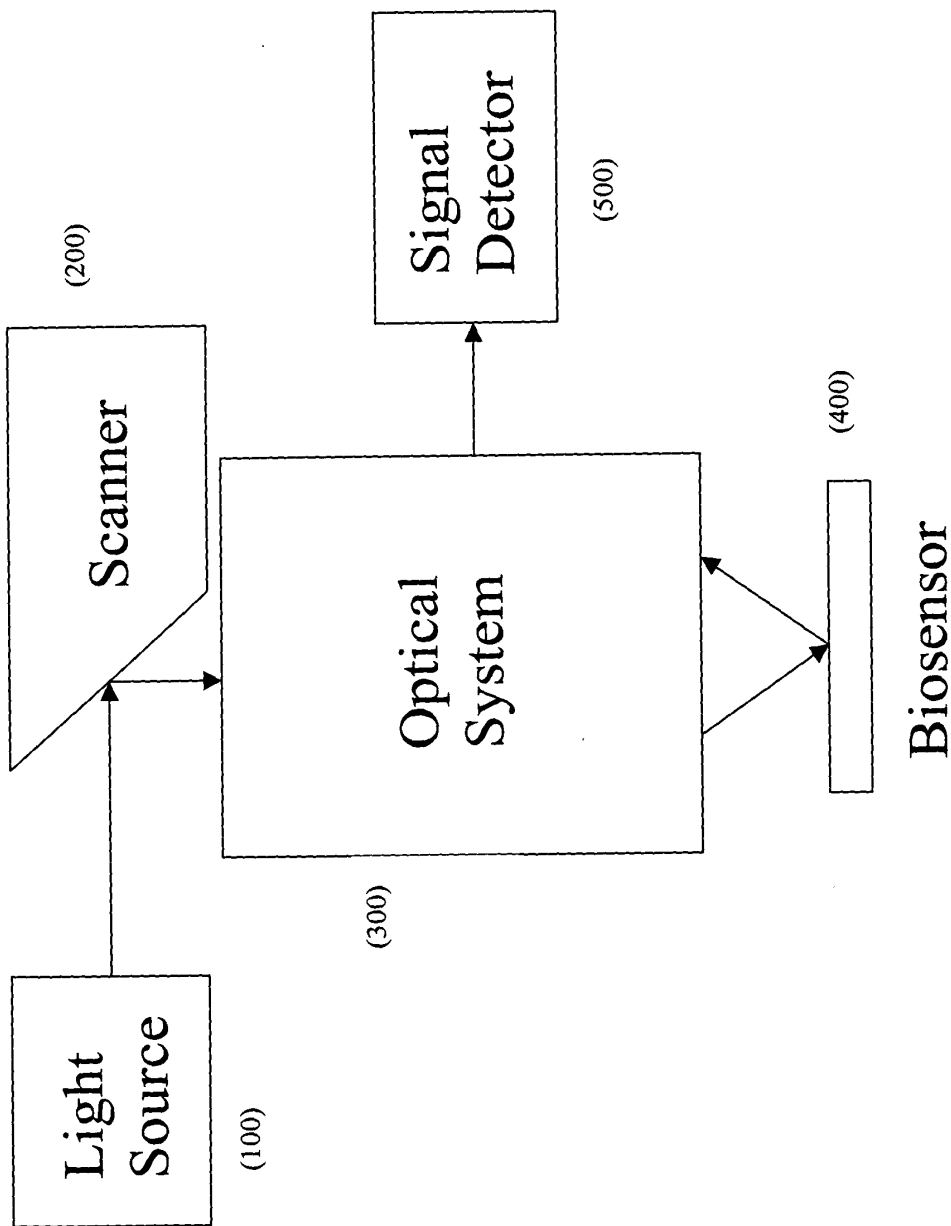


Figure 52